

I Claim:

1. A metering device for conveying small quantities of a substance into an application space, comprising:

a reservoir for holding the substance to be conveyed, said reservoir having a substance filling level;

a diaphragm micropump communicating with said reservoir;

a pump chamber disposed between said reservoir and the application space, said pump chamber having a volume varied by activity of said diaphragm micropump;

said pump chamber and said reservoir being connected by a first orifice;

a second orifice connecting said pump chamber to the application space, said second orifice acting as a nozzle in a direction from said pump chamber towards the application space; and

said first orifice acting as a nozzle in a direction from said reservoir to said pump chamber and being disposed above said filling level of the substance in said reservoir for conveying a gaseous component of the substance in said reservoir.

2. The metering device according to claim 1, wherein said pump chamber and said reservoir have a common boundary surface.

3. The metering device according to claim 1, wherein said pump chamber and the application space have a common boundary surface.

4. The metering device according to claim 1, wherein said diaphragm micropump forms a boundary surface of said pump chamber.

5. The metering device according to claim 1, wherein said diaphragm micropump forms a boundary surface between said pump chamber and said reservoir.

6. The metering device according to claim 1, wherein said diaphragm micropump is a piezoceramic actuator.

7. The metering device according to claim 1, wherein said diaphragm micropump is a bimetal actuator.

8. The metering device according to claim 1, wherein the substance is a liquid.

9. A metering device for conveying small quantities of a substance into an application space, comprising:

a reservoir for holding the substance to be conveyed, said reservoir having a substance filling level;

a diaphragm micropump defining a pump chamber having a volume and being disposed between said reservoir and the application space, said diaphragm micropump varying said volume of said pump chamber; and

an orifice assembly defining:

a first orifice:

connecting said reservoir to said pump chamber;

being a nozzle in a direction from said reservoir to said pump chamber; and

being disposed above said filling level for conveying a gaseous component of the substance in said reservoir; and

a second orifice connecting said pump chamber to the application space, said second orifice being a nozzle in

a direction from said pump chamber to the application space.

10. The metering device according to claim 9, wherein said pump chamber and said reservoir have a common boundary surface.

11. The metering device according to claim 9, wherein said pump chamber and the application space have a common boundary surface.

12. The metering device according to claim 9, wherein said orifice assembly is a part of said diaphragm micropump.

13. The metering device according to claim 9, wherein said orifice assembly is integral with said diaphragm micropump.

14. The metering device according to claim 9, wherein said diaphragm micropump is a piezoceramic actuator.

15. The metering device according to claim 9, wherein said diaphragm micropump is a bimetal actuator.

16. The metering device according to claim 9, wherein the substance is a liquid.